



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

JUL 23 2014

Lee Vardakas, President
AEGIS Energy Services, Inc.
55 Jackson Street
Holyoke, MA 01040

Re: Notice of Determination for the Voluntary Disclosure of Violations by AEGIS Energy Systems, Inc.

On January 23, 2014, AEGIS Energy Services, Inc., ("Aegis"), sent a letter ("the January 2014 letter") to the United States Environmental Protection Agency ("EPA"). The January 2014 letter described two affiliated limited liability companies, Powervestors LLC and Powervestors II, which own and operate combined heat and power ("CHP") units containing engines at host sites. The letter also described a separate but related entity, Aegenco, which manufactures the CHP units at the Holyoke, Massachusetts, facility. For purposes of this document, Aegis, Powervestors, and Powervestors II will be referred to as "Aegis." On June 13, 2014, Aegis provided supplemental information to EPA in support of its original submittal ("the June 2014 supplement").

Specifically, the January 2014 letter and the June 2014 supplement:

1. Disclosed violations involving gas-fired, internal combustion engines at various facilities owned or operated by Aegis in Massachusetts, Connecticut, Rhode Island, New York, and New Jersey, for failure to conduct initial performance testing on 31 engines subject to the New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines found at 40 CFR Part 60, Subpart JJJJ ("Subpart JJJJ");
2. Provided cost information in support of Aegis' claim that major maintenance activities on engines do not constitute reconstruction as defined by Subpart JJJJ and/or the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines found at 40 CFR Part 63, Subpart ZZZZ ("Subpart ZZZZ").
3. Requested a test waiver request for engines that were required to test under Subpart JJJJ;
4. Requested an alternative test method for the use of a hand-held device to test engines subject to Subpart JJJJ in lieu of the EPA reference test method required by Subpart JJJJ;
5. Requested guidance on certifying engines subject to Subpart JJJJ as a manufacturer; and
6. Requested an alternative monitoring frequency to inspect spark plugs of the engines subject to Subpart ZZZZ;

EPA provides the following responses.

1. Self-disclosed violations

The January 2014 letter described Aegis' failure to conduct initial performance testing on 31 engines subject to Subpart JJJJ (see Table 1 of the January 2014 letter and revised Table 1 of the June 2014 supplement).

Because Aegis has fewer than 100 employees, EPA has reviewed the disclosures by Aegis using EPA's "Small Business Compliance Policy," 65 FR 19630 – 19634, April 11, 2000. The Small Business Compliance Policy lists criteria that EPA uses to evaluate the potential for elimination or reduction of civil penalties for self-disclosed violations. These include but are not limited to:

- Voluntary discovery of the violations;
- Disclosure to EPA of the specific violations fully and in writing within 21 calendar days after the small business discovers the violations; and
- Correction of the violations within 90 days of discovery or if not, provision of a written schedule for correcting the violations within 180 calendar days of discovery.

Based on the timing and information contained in the January 2014 letter, EPA has determined that Aegis' disclosure does not meet the conditions of the Small Business Compliance Policy for the following reasons at a minimum:

- Specific disclosure of the violations did not occur within 21 days of discovery of the violations. Although Aegis sent a number of electronic mail messages to EPA personnel in September 2013 with questions regarding applicability of certain provisions of the federal standards, Aegis did not disclose the specific violations described until submission of the January 2014 letter.
- The 31 engines subject to Subpart JJJJ have not yet demonstrated compliance with the notification and reporting requirements, the operational and testing requirements, or the emissions standards of Subpart JJJJ (see 40 CFR §§ 60.4246, 60.4243(b)(2) and 60.4233(e)), and it is unclear if there is a planned schedule for correcting the violations.

Please note that although Aegis' disclosure does not meet the criteria of the Small Business Compliance Policy for penalty elimination or reduction, EPA has the discretion to take into account any good faith efforts to comply by Aegis, in accordance with Section 113(e) of the Clean Air Act, in assessing any penalty for the disclosed violations.

2. "Reconstruction," "Modification," and/or "Rebuilding"

Aegis indicated that it conducts periodic "major maintenance" which includes changing out the engine block and the emissions control equipment, typically after approximately 30,000 hours of engine run time. Aegis stated that it does not believe that such major maintenance constitutes a "modification or reconstruction." EPA is currently evaluating the information Aegis provided in the June 2014 supplement regarding these major maintenance activities.

However, it is important for Aegis to note that any engine that is modified or reconstructed after June 12, 2006 becomes subject to Subpart JJJJ (see 40 CFR § 60.4233(f)(3)). Modified or reconstructed engines must comply with the emission standards specified in 40 CFR § 60.4231(c).

In addition, given the description of what Aegis refers to as major maintenance, it does appear that a number of the engines subject to Subpart JJJJ have been “rebuilt” as defined by section 60.4243(f): “A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 § CFR 94.11(a).” And 40 CFR § 94.11(a) states:

Engine rebuilding means to overhaul an engine or to otherwise perform extensive service on the engine (or on a portion of the engine or engine system). For the purpose of this definition, perform extensive service means to disassemble the engine (or portion of the engine or engine system), inspect and/or replace many of the parts, and reassemble the engine (or portion of the engine or engine system) in such a manner that significantly increases the service life of the resultant engine.

Therefore, it appears that the changes made during major maintenance to the Aegis units subject to Subpart JJJJ constituted engine rebuilding. Engines that are rebuilt or undergo major repair or maintenance must conduct performance testing (see 40 CFR § 60.4243(f)). As a result, the requirement to conduct a performance test may also apply to the “Bay Ridge 1 and 2” engines in New York.

3. Request for test waiver for engines subject to Subpart JJJJ

The engines used in Aegis’ CHP units are non-certified and therefore are subject to initial performance testing requirements at 40 CFR § 60.4243(b)(2)(i). In the January 2014 letter, Aegis identified 31 engines as subject to Subpart JJJJ that are not yet complying with the applicable testing and notification requirements contained in those standards. Aegis explained that it had previously hired a third party emissions testing company, AirTox, to conduct emissions testing on three units in 2011, 2012, and 2013. Aegis asked EPA, under the test waiver provisions of 40 CFR § 60.8, to retroactively waive the compliance testing requirements for all of the Subpart JJJJ units identified in the self-disclosure as the “Woodard configuration” because the three previously tested units had the “same configuration engine as the vast majority of the others in the Aegis and LLCs fleet.” Further, Aegis asked that prospectively it be able establish a procedure for having a third party conduct testing on one engine that is representative of each “unique configuration” of the CHP units with engines that Aegenco manufactures and that Aegis owns and operates. Aegis proposes that if one of the engines demonstrates compliance, that all of the engines in that grouping be deemed in compliance with the performance testing requirements.

EPA’s policy entitled “Clean Air Act National Stack Testing Guidance, September 30, 2005,” states that in order for EPA to waive a compliance test for identical units the owner/operator must meet certain criteria. These include but are not limited to the following conditions:

- The units are located at the same facility;
- The units are produced by the same manufacturer, have the same model number or other manufacturer’s designation in common, and have the same rated capacity and operating specifications;
- The units are operated and maintained in a similar manner; and
- The margin of compliance for the identical units tested is significant and can be maintained on an on-going basis.

As Aegis described, the units are produced by the same manufacturer and have the same model, rated capacity, and operating specifications. The units are not located at the same site. Given the potential variability of the engines' loads and installation conditions, as well as their location at different geographic sites, a testing waiver is not approvable.

4. Request for an alternative test method for engines subject to Subpart JJJJ

In the January 2014 letter, Aegis indicated that historically it used a hand held analyzer (Ferret Instruments GasLink LT Emissions Analyzer) at the factory to "test" emissions from each of its engines. Aegis also indicated that during the last quarter of 2013, Aegenco purchased a new handheld analyzer from ECOM America Ltd., the J2KN PRO Industrial Analyzer, capable of performing the CTM-034 Method (a conditional draft test method) as a functional equivalent of ASTM Method D6522-00. Based on the limited information provided in the January 2014 letter, EPA does not believe that the J2KN PRO handheld analyzer and substitute methods are approvable as an alternative test method. In the January 2014 letter, Aegis stated that if certification of the engines that Aegenco manufactures is not possible or preferable, it may seek approval under 40 CFR § 60.8 to use the hand held analyzer supplemented by a separate method, or to substitute the CO testing as a surrogate for VOC. Although ASTM Method D6522-00 is referenced by Subpart JJJJ as an allowable method for measuring carbon monoxide (CO) and nitrogen oxide (NO), it is not an EPA-approved reference test method for measuring volatile organic compounds (VOCs), and does not provide three one-hour test runs as would normally be required by the EPA reference methods (see 40 CFR § 60.8(f)).

Therefore, the alternative test method proposed in the January 2014 letter is not approvable at this time. However, if Aegis continues to be interested in pursuing this type of alternative test method approval, it should contact Steffan Johnson, Acting Group Leader, Measurement Technology Group, Office of Air Quality Planning and Standards, to determine what additional information would be required.

5. Request for guidance on certifying engines as an engine manufacturer

In the January 2014 letter, Aegis asked how Aegenco can certify the engines it manufactures in accordance with the applicable federal regulations. On September 23, 2013, Diane Molokotos of Aegis had posed this question in an email to Melanie King of EPA. EPA replied at that time that for engines rated at greater than 25 horsepower and used in non-emergency applications, the procedures for certifying the engines are referenced in §60.4241(b). Based on an email dated May 1, 2014 from Abbie Baker, counsel for Aegis, it appears Aegis has recently begun the engine certification process. Therefore, this letter does not provide any additional guidance on the certification process.

6. Request for an alternative monitoring frequency to inspect spark plugs of engines subject to Subpart ZZZZ.

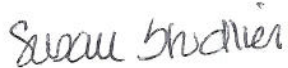
Regarding spark plug maintenance requirements, in the January 2014 letter, Aegis stated that it was not certain whether it had violated the spark plug maintenance requirements of 40 CFR Part 63, Subpart ZZZZ after the compliance deadline of October 19, 2013. Aegis indicated that it has now changed its spark plug maintenance schedule to comply with Subpart ZZZZ's 1,440 hour

requirement. Your letter also requested a spark plug inspection schedule at an interval deemed appropriate by the maintenance supervisor. If you would like to pursue this request further, please provide additional information.

Conclusion

As discussed above, there are a number of steps that Aegis must take to demonstrate compliance with applicable Clean Air Act requirements. Under the circumstances EPA believes it appropriate to establish a compliance schedule for Aegis to address the self-reported violations of Subpart JJJJ. To this end EPA is enclosing a proposed draft Administrative Order on Consent. After you have had the opportunity to review this letter and the draft Administrative Order on Consent, please contact Steve Rapp, Chief of the Air Technical Unit, at (617) 918-1551 or have your counsel contact Tom Olivier, Senior Enforcement Council, at (617) 918-1737 to discuss next steps.

Sincerely,



Susan Studlien, Director
Office of Environmental Stewardship

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Enclosures

